



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,956	04/20/2004	John Man Kwong Kwan	358-001CIPC	7144
23429 7590 02/23/2007 GREGORY SMITH & ASSOCIATES 3900 NEWPARK MALL ROAD, 3RD FLOOR NEWARK, CA 94560			EXAMINER ARANI, TAGHI T	
			ART UNIT	PAPER NUMBER
			2131	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/23/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary.	Application No.		Applicant(s)	
	10/828,956		KWAN, JOHN MAN KWONG	
	Examiner		Art Unit	
	Taghi T. Arani		2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/04/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-19 have been examined and are pending

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2-19 recites the limitation "The apparatus of claim 115", "The apparatus of claim 119" and "The apparatus of claim 122" in the corresponding preambles. There is insufficient antecedent basis for the claims 115, 119 and 122 in the claims.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-19 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 41-56 of U.S. Patent No. 6,792,535. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claims 1-19 of the instant application are anticipated by patent claims 41-56 in that the claims 41-56 of the patent contain all the limitations of the instant application (see Claim-comparison table below). Claims 1-19 of the instant application therefore is not patentably distinct from the earlier patent claim and as such is unpatentable for obvious-type double patenting (*In re Goodman (CAFC) 29 USPQ2d 2010 (12/3/1993)*).

Claim No.	Application No.	Claim No.	Patent
	10/828,956		6,792,535
1	An apparatus for encoding a mark into digital data, comprising: means for locating in the digital data, using a predetermined pattern, at least two values that represents a flat area; and	41	A system for encoding a mark into unencoded data to create an encoded data, comprising: at least one processor coupled with at least one memory storing an encoder as at least one program comprising a target area locator for locating at least two values in the unencoded data using a predetermined pattern that

	<p>means for modifying the values in the flat area to encode a mark into the flat area;</p> <p>wherein the means for locating in the digital data further comprises:</p> <p>means for calculating a variability for a selected portion of the digital data using the predetermined pattern; and</p> <p>means for representing the flat area when the variability is less than a predetermined amount;</p> <p>wherein the apparatus for encoding is part of a device receiving an unencoded data to create the digital data; and</p> <p>wherein the apparatus for</p>		<p>represent a flat area; and</p> <p>a marker for modifying at least one of the values in the flat area encoding the mark into the flat area to create the encoded data;</p> <p>wherein the target area locator further performs: calculating a variability for a selected portion of the digital data using the predetermined pattern; and</p> <p>representing the flat area when the variability is less than a predetermined amount.</p>
--	--	--	---

	encoding is part of the device using the values in the flat area to create an encoded data.		
2	The apparatus of claim 115, wherein the predetermined pattern is a regular pattern.	51	The system of claim 41, wherein the predetermined pattern is a regular pattern.
3	The apparatus of claim 115, wherein the predetermined pattern is an irregular pattern.	52	The system of claim 41, wherein the predetermined pattern is an irregular pattern.
4	The apparatus of claim 115, wherein the predetermined pattern identifies a consecutive set of values.	53	The system of claim 41, wherein the predetermined pattern identifies a consecutive set of values.
5	The apparatus of claim 115, wherein the means for modifying the values further comprises: means for modifying the values according to a recognizable	42	The system of claim 41, wherein the marker is further comprised of: the marker modifies at least one of the values according to a recognizable amount.

	amount.		
6	The apparatus of claim 119, wherein the means for modifying the values further comprises: means for adding the recognizable amount to the values.	43	The system of claim 42, wherein the marker is further comprised of: the marker adds the recognizable amount to at least one of the values.
7	The apparatus of claim 119, wherein the means for modifying the values further comprises: means for subtracting the recognizable amount from the values.	44	The system of claim 42, wherein the marker is further comprised of: the marker subtracts the recognizable amount to at least one of the values.
8	The apparatus of claim 119, further comprising the means for computing the recognizable amount includes: a means for calculating a function of the variability in the flat area.	45	The system of claim 42, wherein the marker is further comprised of: the marker computes the recognizable amount as a function of the variability in the flat area.

9	The apparatus of claim 122, wherein the means for computing the recognizable amount further comprises: means for computing the recognizable amount as a multiple of the variability in the flat area.	46	The system of claim 45, wherein the marker is further comprised of: the marker computes the recognizable amount as a multiple of the variability in the flat area.
10	The apparatus of claim 119, further comprising: means for modifying the values in the flat area to provide at least one known peak in the flat area.	47	The system of claim 42, wherein the marker modifies values in the flat area to provide at least one of the known peaks in the flat area.
11	The apparatus of claim 115, wherein the means for modifying the values further comprises: means for modifying at least two of the values in the digital data to represent a single mark value in the flat area.	48	The system of claim 41, wherein the marker modifies multiple of the values in the digital data to represent a single mark value in the flat area.
12	The apparatus of claim 115,	49	The system of claim 41, wherein

	further comprising: means for locating in the digital data, using a predetermined pattern, at least two values that represents a second flat area; and means for modifying the values in the second flat area to encode the mark into the second flat area.		the target area locator further locates in the digital data using the predetermined pattern that represents a second flat area; and wherein the marker further modifies at least one of the values in the second flat area to encode the mark into the second flat area.
13	The apparatus of claim 115, further comprising: means for converting the format of the digital data.	50	The system of claim 42, at least one of the processors coupled with at least one of the memories storing at least one program comprising a format conversion engine for converting the digital data to another format.
14	The apparatus of claim 115, at least one of the means is implemented using a computer accessing a memory.		
15	The apparatus of claim 115, wherein the device is included in a computer receiving the unencoded data.		
16	The apparatus of claim 115, wherein the device communicates with a processor within a computer to		

	create the encoded data within the computer.		
17	The apparatus of claim 115, wherein the predetermined pattern is one dimensional.	54	The system of claim 41, wherein the predetermined pattern is one dimensional.
18	The apparatus of claim 115, wherein the predetermined pattern is two dimensional.	55	The system of claim 41, wherein the predetermined pattern is two dimensional.
19	The method of claim 115, wherein the predetermined pattern is three dimensional.	56	The system of claim 41, wherein the predetermined pattern is three dimensional.

Conclusion

4. Prior arts made of record, not relied upon:

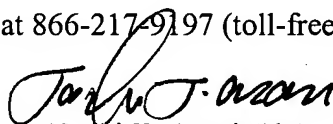
See the attached PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taghi T. Arani whose telephone number is (571) 272-3787. The examiner can normally be reached on 8:00-5:30 Mon-Fri.

Art Unit: 2131

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Taghi T. Arani, Ph.D.

Primary Examiner

Art Unit 2131

211102